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SIDHARTHA INSTITUTE OF SCIENCE & TECHNOLOGY NARAYANAVANAM ROAD, PUTTUR.

DEPARTMENT OF MECHANICAL ENGINEERING

M-EOLAS

ABOUT THE DEPARTMENT

The Department of Mechanical Engineering in Siddhartha Institute of Science and Technology (SISTK) was established in 2012-2013 with an intake of 60. In a year 2013-2014 Intake has been increased to 120 students. In a year 2014-2015 Intake has been increased to 180 students. The department is continuously Striving to achieve excellence in education, academic and Industry oriented research, with perfect blend of Intellectual.

VISION:

Mechanical Engineering is one of the largest, broadest and oldest engineering disciplines. It finds its application in every branch of industry, including aerospace, manufacturing, automotive, building systems, energy, chemical and high-technology sectors. To be a centre of excellence in the field of Mechanical Engineering where the best of teaching, learning and research synergize.

MISSION:

To prepare effective and responsible graduate and engineers for global requirements by providing quality education. Motivating students to excel by augmenting their knowledge to continuing education programme. Conduct basic and applied research and to generate intellectual property and proide well Laboraty Facilites and Conducted Seminars with Industrial Experts for Students.

HOD MESSAGE:

A very warm welcome to the website of the Department of Mechanical Engineering, happens to be the back bone of any industry with amazing versatility. The department of Mechanical Engineering strives to train students in mechanical engineering science as well as application of these scientific methods to conceive, organize and carry out scientific design of engineering system.

The department of Mechanical Engineering has started from the session 2012-13. The department has well-equipped labs to impart sound practical knowledge of the subject. This department has dedicated and competent faculty members to impart quality education, project guidance, personality development to enable them to be placed with a reputed organizations.



D.SUDHAKARA HOD MECH Dept.

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Faculty achievements

"Difficulties in your Life don't come to destroy you, but to help you realize your hidden potential".

Team work is the Secret that make common people achieve uncommon result

-Ifeanyi Enoch Onuoha.

FACLTY ACHIEVEMENTS:

INTERNATIONAL JOURNALS:

- Dr P Kumar Babu (2014) "The Profile of Longitudinal Fluid Velocity in an Axially Symmetrical Jet Mixing of an Incompressible Fluid" (IJMCA- International Journal of Mechanical Engineering & Computer Applications ISSN2320-6349), Vol.2, IssueNo.4, July-August 2014, pp. 91-93.
- D.Sudhakara "Modal & Thermal Analysis of Single Throw Crankshaft", International Journal of Emerging Technology and Advanced Engineering, Journal, Volume 4, Issue 9, Sep 2014.
- N.Sreedhar "Finite Element Analysis of Concave and Convex Die Contours in Wire Drawing Process" International Journal of Emerging Technology (IJTAE), ISSN 2250 2459, Sep 2014.
- Jaya kishore .S "A study on Basic Water Cooling System of Gas Compressor Engine" International Journal of Emerging Technology (IJTAE) ,ISSN 2250 2459, Volume 4, Issue 9, Sep 2014.

INTERNATIONAL CONFERENCES:

• D.sudhakara, Dr. G Prasanthi (2014) "Experimental Investigation of Optimization of Process Parameters of Wire cut EDM by Taguchi Method" *ICMMM-2014*, Aug8th and 9th of 2014, conducted by IITM, Chennai.

NATIONAL CONFERENCES:

- **Dr P Kumar Babu(2014)**, "Design and Optimization of Outlet shape on Coaxial turbulent jet by using CFD", National Conference on "Recent Advances in Mechanical Engineering- RAME-2K14" organized by the Department of Mechanical Engineering, Sri Venkateswara College of Engineering and Technology, Chittoor, Andhra Pradesh on **8th August 2014**.
- N.Sreedhar (2014), "Thermal and Structural analysis of Wire drawing with different Die Contours", National Conference on "Recent Advances in Mechanical Engineering- RAME-2K14" organized by the Department of Mechanical Engineering, Sri Venkateswara College of Engineering and Technology, Chittoor, Andhra Pradesh on 8th August 2014.

PROFESSIONAL MEMBERSHIPS:

• Certified as (FIE)Fellow of the Institution of Engineers(India): **F-118983-9**, in the Mechanical Engineering by The Institution of Engineers(India), Kolkata during July 2014.

ACADEMIC TOPPERS: Volume 1 Issue 1 **JULY-SEP 2014** PAGE NO 3 S.No Roll No Name Percentage Rank 1 124E1A0340 RAJASEKHAR.K 78.26 1 ACADEMIC TOPPERS 2 124E1A0304 **ASHFACK SHAIK** 74.53 2 ABOUT MEGSA 3 72.13 3 124E1A0358 & YOGESH.M & 124E1A0309 DHANANJAYA.T

INAUGERATION OF MEGSA:

Mechanical Engineering students are formed as Association to perform The academic & Innovation activities (Paper Presentations, Poster Presentations, Short films, Quiz etc.,) of **MEGSA 2014-2015 (Mechanical Engineering Graduate Student Association)** were officially inaugurated on September 2014. The function was rich with the presence of Principal, HOD along with Faculty members of MEGSA.

A leader is the one who Knows the way, goes the way, and shows the way.

-John-C. Maxwell.

R.C. CAR WORKSHOP:

In addition to The academic Activites students are participated in "Automobile Design (R.C. Car) Workshop" was officially organized by Staff & Students on 10th September 2014. The function was rich with the presence of Chairman, Principal, HOD along with Faculty members and Students in our College premises Students from various colleges are also participated in this workshop it creates Practical Exposure to develop Engineers and to promote students in Research work. At the End of the Session students Run their Designed R.C.Car in the Campus premises and Prizes are distributed for the Students for Best Designing of R.C.Car and Best Fabricated R.C.Car.

R.C CAR WORKSHOP



Once you start working on something. don't be afraid of failure and don't abandon it. People who work sincerely are the Happiest

-Chankya.

| | FACULTY LIST IN MECHANICAL ENGINEERING | | | | | |
|---|--|------------------------|--------------------------|---------------------|-------|--|
| Volume 1 Issue 1 JULY-SEP 2014 PAGE NO 4 | S.No | Name | Designation | Specializa- tion | Photo | |
| 111021107 | 1 | Dr.P.KUMAR BABU | Professor & Principal | Ph.D R&AC | | |
| FACULTY LIST | | | | | | |
| Nice Stories: | 2 | Mr. D. SUDHAKARA | Assoc Pro | (Ph.D) AMS | | |
| Once there was a farmer who had four sons. They were always quarreling with each other. One day, farmer called his sons and asked them to try to | 3 | Mr. JAYA KISHORE.S | Assis Prof | M.Tech CAD/CAM | | |
| break bundle of sticks. Each one tried but failed. Then the farmer gave one stick each to break. Each of them was able to do it easily. The farmer said, If you | 4 | Mr. K.BHARATH KUMAR | Assis Prof | M.Tech CAD/CAM | | |
| are united nobody can get better of you. But you keep quarrelling, you will be broken one by one. | 5 | Mr. A.SURESH | Assis Prof | M.Tech CAD/CAM | | |
| Proverb: "Union is a Great | 6 | Mr. N.SREEDHAR | Assis Prof | M.Tech CAD/CAM | | |
| Strength" | 7 | Mr. V.GNANA PRAKASH | Assis Prof | M.Tech CAD/CAM | | |
| | 8 | Mr. A.GURUNADHAM | Assis Prof | M.Tech CAD/CAM | | |
| "Imagination is more important than knowledge. Knowledge is limited." | 9 | Miss. O.KAVITHA | Assis Prof | B.Tech | | |
| -Albert Einstein. | 10 | Miss. P.SWATHI | Assis Prof | B.Tech | | |
| | 11 | Mr. DHEVARAJULU | Assis Prof | B.Tech | | |

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Nice Stories:

A wealthy man requested an old scholar to wean his son away from his bad habits. The scholar took the youth for a stroll through a garden. Stopping suddenly he asked the boy to pull out a tiny plant growing there. The youth held the plant between his thumb and forefinger and pulled it out. The old man then asked him to pull out a slightly bigger plant. The youth pulled hard and the plant came out, roots and all. "Now pull out that one," said the old man pointing to a bush. The boy had to use all his strength to pull it out.

"Now take this one out," said the old man, indicating a guava tree. The youth grasped the trunk and tried to pull it out. But it would not budge. "It's impossible," said the boy, panting with the effort. "So it is with bad habits," said the sage. "When they are young it is easy to pull them out but when they take hold they cannot be uprooted." The session with the old man changed the boy's life.

Moral: Don't wait for Bad



Habits to grow in you, drop them while you have control over it else they will get control you.

Chief Editor: Mr. D.SUDHAKARA

M.Tech (PhD)

HOD & Associate Professor

Editor: Mr. S.JAYA KISHORE

M.Tech Assistant Professor

TECHNICAL ARTICLE:

SHAPE MEMORY ALLOYS (SMAs):

With the increased emphasis on both reliability and multi functionality in the Aerospace Industry, active materials are becoming an enabling technology capturing the attention of an increasing number of engineers and scientists world wide. This article reviews the class of active materials known as Shape Memory Alloys (SMAs), especially as implemented in aerospace applications. To begin, a general overview of shape memory alloys is provided. The useful Properties and engineering effects of SMAs are described. The SMAs discussion is going on on the Applications of Shape Memory Alloys.

Shape Memory Alloys Images:

Fig.1.Temperature vs load graph of

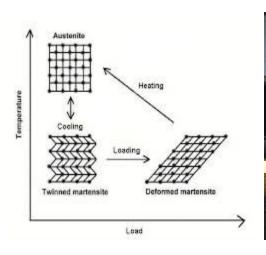


Fig.2.Aeroplane Body prepared with



SMAs. **APPLICATIONS:**

SMAs.

From early "Thermal Sciences", engineers and other designers in many fields have been developing ways to convert thermal energy into mechanical work via the crystallographic phase change of SMAs. Hydraulic tubing coupling in F-14 1971. Areas of Fixed wing Aircraft, Rotor craft and Space craft. Fixed wing Rotorcraft Applications. In civil Engineering applications and Bio-Medical Equipment are also Designed and Fabricated by SMAs. Since Scientists are finding Solutions for problems of SMAs and to make its usage in all Commercial fiels of Engineering Applications.